

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

88

PLUS Search Results for S/N 10055088, Searched August 09, 2004

The Patent Linguistics Utility System (PLUS) is a USPTO automated search

system for U.S. Patents from 1971 to the present. PLUS is a query-by-example search system which produces a list of patents that are

most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

4801870	5247522
5930270	5337414
5982681	5396596
5341096	5406438
5652754	5608275
5325062	5612488
5218196	5796274
5548463	5867491
5559664	5939802
6101458	6204493
5727000	6222514
4527272	6222514
6125465	5422891
6526356	5311137
6701477	6055661
6000042	6175244
6170062	5630048
5511162	5933594
5946214	6076078
6553329	6128755
5214577	4494717
4528458	4617630
4990895	5195046
5003573	5819027
5335230	5862125
5448176	6002260
5574753	6026073
5636137	6122282
5963850	6148157
5963312	6147966
6173440	6169489
6433558	6754845
6636048	5260946
5386796	5796935
5960113	5260947

10055088_LIST

5269016	5321354
5940367	5446399
4284522	5600576
5333130	5825191
5533005	4472789
5581713	4795982
5694615	5425035
6373838	5548211
6392401	5673028
6446218	6028441
6453468	6058502
4371832	6087846
5867358	6114181
4324542	3882386
4520348	4039813

10055088 CLS
Most Frequently Occurring Classifications of Patents Returned
From A Search of 10055088 on August 09, 2004

Original Classifications

4 714/732
4 714/736
3 324/765
2 324/767
2 340/635
2 345/84
2 370/221
2 702/35
2 714/26
2 714/4

Cross-Reference Classifications

5 714/732
4 714/736
3 324/765
3 324/770
3 340/653
3 714/47
3 714/733
2 307/44
2 307/80
2 324/117R
2 324/537
2 324/543
2 324/73.1
2 340/516
2 345/55
2 359/326
2 361/154
2 370/225
2 703/2
2 713/340
2 714/2
2 714/40
2 714/734
2 714/737
2 714/738

Combined Classifications

9 714/732
8 714/736
6 324/765
4 714/47

10055088_CLS

4 714/733
3 324/537
3 324/73.1
3 324/770
3 340/635
3 340/653
3 370/225
3 713/340
3 714/4
3 714/40
3 714/737
2 250/221
2 307/44
2 307/64
2 307/80
2 324/117R
2 324/127
2 324/158.1
2 324/509
2 324/522
2 324/543
2 324/628
2 324/751
2 324/767
2 340/516
2 345/55
2 345/84
2 359/326
2 361/104
2 361/154
2 365/201
2 370/221
2 370/228
2 702/35
2 703/2
2 714/11
2 714/2
2 714/26
2 714/724
2 714/734
2 714/738

10055088_CLSTITLES

Titles of Most Frequently Occurring Classifications of Patents Returned

From A Search of 10055088 on August 09, 2004

- 9 714/732 (4 OR, 5 XR)
Class 714 : ERROR DETECTION/CORRECTION AND FAULT
DETECTION/RECOVERY
714/699 PULSE OR DATA ERROR HANDLING
714/724 .Digital logic testing
714/732 ..Signature analysis
- 8 714/736 (4 OR, 4 XR)
Class 714 : ERROR DETECTION/CORRECTION AND FAULT
DETECTION/RECOVERY
714/699 PULSE OR DATA ERROR HANDLING
714/724 .Digital logic testing
714/736 ..Device response compared to expected
fault-free response
- 6 324/765 (3 OR, 3 XR)
Class 324 : ELECTRICITY: MEASURING AND TESTING
324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF
ELECTRIC COMPONENTS
324/537 .Of individual circuit component or element
324/765 ..Test of semiconductor device
- 4 714/47 (1 OR, 3 XR)
Class 714 : ERROR DETECTION/CORRECTION AND FAULT
DETECTION/RECOVERY
714/100 DATA PROCESSING SYSTEM ERROR OR FAULT HANDLING
714/1 .Reliability and availability
714/47 ..Performance monitoring for fault avoidance
- 4 714/733 (1 OR, 3 XR)
Class 714 : ERROR DETECTION/CORRECTION AND FAULT
DETECTION/RECOVERY
714/699 PULSE OR DATA ERROR HANDLING
714/724 .Digital logic testing
714/733 ..Built-in testing circuit (BILBO)
- 3 324/537 (1 OR, 2 XR)
Class 324 : ELECTRICITY: MEASURING AND TESTING
324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF
ELECTRIC COMPONENTS
324/537 .Of individual circuit component or element

10055088_CLSTITLES

- 3 324/73.1 (1 OR, 2 XR)
 - Class 324 : ELECTRICITY: MEASURING AND TESTING
 - 324/73.1 PLURAL, AUTOMATICALLY SEQUENTIAL TESTS
- 3 324/770 (0 OR, 3 XR)
 - Class 324 : ELECTRICITY: MEASURING AND TESTING
 - 324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF ELECTRIC COMPONENTS
 - 324/537 .Of individual circuit component or element
 - 324/770 ..Liquid crystal device test
- 3 340/635 (2 OR, 1 XR)
 - Class 340 : COMMUNICATIONS: ELECTRICAL
 - 340/500 CONDITION RESPONSIVE INDICATING SYSTEM
 - 340/540 .Specific condition
 - 340/635 ..Condition of electrical apparatus
- 3 340/653 (0 OR, 3 XR)
 - Class 340 : COMMUNICATIONS: ELECTRICAL
 - 340/500 CONDITION RESPONSIVE INDICATING SYSTEM
 - 340/540 .Specific condition
 - 340/635 ..Condition of electrical apparatus
 - 340/653 ...Electronic circuit or component
- 3 370/225 (1 OR, 2 XR)
 - Class 370 : MULTIPLEX COMMUNICATIONS
 - 370/216 FAULT RECOVERY
 - 370/225 .Bypass an inoperative channel
- 3 713/340 (1 OR, 2 XR)
 - Class 713 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: SUPPORT
 - 713/300 COMPUTER POWER CONTROL
 - 713/340 .Having power source monitoring
- 3 714/4 (2 OR, 1 XR)
 - Class 714 : ERROR DETECTION/CORRECTION AND FAULT DETECTION/RECOVERY
 - 714/100 DATA PROCESSING SYSTEM ERROR OR FAULT HANDLING
 - 714/1 .Reliability and availability
 - 714/2 ..Fault recovery
 - 714/3 ...By masking or reconfiguration
 - 714/4Of network
- 3 714/40 (1 OR, 2 XR)
 - Class 714 : ERROR DETECTION/CORRECTION AND FAULT DETECTION/RECOVERY

10055088_CLSTITLES

714/100 DATA PROCESSING SYSTEM ERROR OR FAULT HANDLING

714/1 .Reliability and availability

714/25 ..Fault locating (i.e., diagnosis or testing)

714/40 ...Component dependent technique

3 714/737 (1 OR, 2 XR)

Class 714 : ERROR DETECTION/CORRECTION AND FAULT
DETECTION/RECOVERY

714/699 PULSE OR DATA ERROR HANDLING

714/724 .Digital logic testing

714/737 ..Device response compared to fault
dictionary/truth table

2 250/221 (1 OR, 1 XR)

Class 250 : RADIANT ENERGY

250/200 PHOTOCELLS; CIRCUITS AND APPARATUS

250/216 .Optical or pre-photocell system

250/221 ..Controlled by article, person, or animal

2 307/44 (0 OR, 2 XR)

Class 307 : ELECTRICAL TRANSMISSION OR INTERCONNECTION
SYSTEMS

307/43 PLURAL SUPPLY CIRCUITS OR SOURCES

307/44 .One source floats across or compensates for
other source

2 307/64 (1 OR, 1 XR)

Class 307 : ELECTRICAL TRANSMISSION OR INTERCONNECTION
SYSTEMS

307/43 PLURAL SUPPLY CIRCUITS OR SOURCES

307/64 .Substitute or emergency source

2 307/80 (0 OR, 2 XR)

Class 307 : ELECTRICAL TRANSMISSION OR INTERCONNECTION
SYSTEMS

307/43 PLURAL SUPPLY CIRCUITS OR SOURCES

307/80 .Selective or optional sources

2 324/117R (0 OR, 2 XR)

Class 324 : ELECTRICITY: MEASURING AND TESTING

324/76.11 MEASURING, TESTING, OR SENSING ELECTRICITY, PE

R

SE

324/117R .Magnetic saturation (e.g., in field or in
amplifier)

10055088_CLSTITLES

2 324/127 (1 OR, 1 XR)
 Class 324 : ELECTRICITY: MEASURING AND TESTING
 324/76.11 MEASURING, TESTING, OR SENSING ELECTRICITY, PE
 R
 SE
 324/126 .With coupling means (e.g., attenuator, shunt)
 324/127 ..Transformer (e.g., split core admits
 conductor carrying unknown current)
 2 324/158.1 (1 OR, 1 XR)
 Class 324 : ELECTRICITY: MEASURING AND TESTING
 324/158.1 MISCELLANEOUS
 2 324/509 (1 OR, 1 XR)
 Class 324 : ELECTRICITY: MEASURING AND TESTING
 324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF
 ELECTRIC COMPONENTS
 324/509 .Of ground fault indication
 2 324/522 (1 OR, 1 XR)
 Class 324 : ELECTRICITY: MEASURING AND TESTING
 324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF
 ELECTRIC COMPONENTS
 324/512 .For fault location
 324/522 ..By voltage or current measuring
 2 324/543 (0 OR, 2 XR)
 Class 324 : ELECTRICITY: MEASURING AND TESTING
 324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF
 ELECTRIC COMPONENTS
 324/537 .Of individual circuit component or element
 324/543 ..Single conductor cable
 2 324/628 (1 OR, 1 XR)
 Class 324 : ELECTRICITY: MEASURING AND TESTING
 324/600 IMPEDANCE, ADMITTANCE OR OTHER QUANTITIES
 REPRESENTATIVE OF ELECTRICAL STIMULUS/RE
 SPONSE
 RELATIONSHIPS
 324/612 .Parameter related to the reproduction or
 fidelity of a signal affected by a circui
 t under test
 324/627 ..Shielding effectiveness (SE)
 324/628 ...Circuit interference (e.g., crosstalk)
 measurement
 2 324/751 (1 OR, 1 XR)

10055088_CLSTITLES

Class 324 : ELECTRICITY: MEASURING AND TESTING
 324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF
 ELECTRIC COMPONENTS
 324/537 .Of individual circuit component or element
 324/750 ..System sensing fields adjacent device under
 test (DUT)
 324/751 ...Using electron beam probe

2 324/767 (2 OR, 0 XR)
 Class 324 : ELECTRICITY: MEASURING AND TESTING
 324/500 FAULT DETECTING IN ELECTRIC CIRCUITS AND OF
 ELECTRIC COMPONENTS
 324/537 .Of individual circuit component or element
 324/765 ..Test of semiconductor device
 324/766 ...With barrier layer
 324/767Diode

2 340/516 (0 OR, 2 XR)
 Class 340 : COMMUNICATIONS: ELECTRICAL
 340/500 CONDITION RESPONSIVE INDICATING SYSTEM
 340/501 .With particular system function (e.g.,
 temperature compensation, calibration)
 340/514 ..Testing
 340/516 ...Automatic (e.g., periodic, start-up)

2 345/55 (0 OR, 2 XR)
 Class 345 : COMPUTER GRAPHICS PROCESSING, OPERATOR
 INTERFACE PROCESSING, AND SELECTIVE VISUAL
 DISPLAY
 SYSTEMS
 345/30 PLURAL PHYSICAL DISPLAY ELEMENT CONTROL SYSTEM
 (E.G., NON-CRT)
 345/55 .Display elements arranged in matrix (e.g.,
 rows and columns)

2 345/84 (2 OR, 0 XR)
 Class 345 : COMPUTER GRAPHICS PROCESSING, OPERATOR
 INTERFACE PROCESSING, AND SELECTIVE VISUAL
 DISPLAY
 SYSTEMS
 345/30 PLURAL PHYSICAL DISPLAY ELEMENT CONTROL SYSTEM
 (E.G., NON-CRT)
 345/55 .Display elements arranged in matrix (e.g.,
 rows and columns)
 345/84 ..Light-controlling display elements

2 359/326 (0 OR, 2 XR)
 Class 359 : OPTICS: SYSTEMS

10055088_CLSTITLES
OPTICAL FREQUENCY CONVERTER

359/326

- 2 361/104 (1 OR, 1 XR)
Class 361 : ELECTRICITY: ELECTRICAL SYSTEMS AND DEVICES
- 361/1 SAFETY AND PROTECTION OF SYSTEMS AND DEVICES
361/103 .Circuit interruption by thermal sensing
361/104 ..With fuse
- 2 361/154 (0 OR, 2 XR)
Class 361 : ELECTRICITY: ELECTRICAL SYSTEMS AND DEVICES
- 361/139 CONTROL CIRCUITS FOR ELECTROMAGNETIC DEVICES
361/143 .Systems for magnetizing, demagnetizing, or
controlling the magnetic field
361/152 ..Including particular drive circuit
361/154 ...Including means to establish plural distinct
current levels (e.g., high, low)
- 2 365/201 (1 OR, 1 XR)
Class 365 : STATIC INFORMATION STORAGE AND RETRIEVAL
365/189.01 READ/WRITE CIRCUIT
365/201 .Testing
- 2 370/221 (2 OR, 0 XR)
Class 370 : MULTIPLEX COMMUNICATIONS
370/216 FAULT RECOVERY
370/221 .Bypass an inoperative station
- 2 370/228 (1 OR, 1 XR)
Class 370 : MULTIPLEX COMMUNICATIONS
370/216 FAULT RECOVERY
370/225 .Bypass an inoperative channel
370/228 ..Spare channel
- 2 702/35 (2 OR, 0 XR)
Class 702 : DATA PROCESSING: MEASURING, CALIBRATING, OR
TESTING
702/1 MEASUREMENT SYSTEM IN A SPECIFIC ENVIRONMENT
702/33 .Mechanical measurement system
702/35 ..Flaw or defect detection
- 2 703/2 (0 OR, 2 XR)
Class 703 : DATA PROCESSING: STRUCTURAL DESIGN,
MODELING, SIMULATION, AND EMULATION
703/2 MODELING BY MATHEMATICAL EXPRESSION

10055088_CLSTITLES

2	714/11	(1 OR, 1 XR)
	Class	714 : ERROR DETECTION/CORRECTION AND FAULT DETECTION/RECOVERY
	714/100	DATA PROCESSING SYSTEM ERROR OR FAULT HANDLING
	714/1	.Reliability and availability
	714/2	..Fault recovery
	714/3	...By masking or reconfiguration
	714/10Of processor
	714/11Concurrent, redundantly operating processors
2	714/2	(0 OR, 2 XR)
	Class	714 : ERROR DETECTION/CORRECTION AND FAULT DETECTION/RECOVERY
	714/100	DATA PROCESSING SYSTEM ERROR OR FAULT HANDLING
	714/1	.Reliability and availability
	714/2	..Fault recovery
2	714/26	(2 OR, 0 XR)
	Class	714 : ERROR DETECTION/CORRECTION AND FAULT DETECTION/RECOVERY
	714/100	DATA PROCESSING SYSTEM ERROR OR FAULT HANDLING
	714/1	.Reliability and availability
	714/25	..Fault locating (i.e., diagnosis or testing)
	714/26	...Artificial intelligence (e.g., diagnostic expert system)
2	714/724	(1 OR, 1 XR)
	Class	714 : ERROR DETECTION/CORRECTION AND FAULT DETECTION/RECOVERY
	714/699	PULSE OR DATA ERROR HANDLING
	714/724	.Digital logic testing
2	714/734	(0 OR, 2 XR)
	Class	714 : ERROR DETECTION/CORRECTION AND FAULT DETECTION/RECOVERY
	714/699	PULSE OR DATA ERROR HANDLING
	714/724	.Digital logic testing
	714/734	..Structural (in-circuit test)
2	714/738	(0 OR, 2 XR)
	Class	714 : ERROR DETECTION/CORRECTION AND FAULT DETECTION/RECOVERY
	714/699	PULSE OR DATA ERROR HANDLING

10055088_CLSTITLES
714/724 .Digital logic testing
714/738 ..Including test pattern generator